

CPC COOPERATIVE PATENT CLASSIFICATION

B PERFORMING OPERATIONS; TRANSPORTING

(NOTES omitted)

SHAPING

B21 MECHANICAL METAL-WORKING WITHOUT ESSENTIALLY REMOVING MATERIAL; PUNCHING METAL (casting, powder metallurgy [B22](#); shearing [B23D](#); working of metal by the action of a high concentration of electric current [B23H](#); soldering, welding, flame-cutting [B23K](#); other working of metal [B23P](#); punching sheet material in general [B26F](#); processes for changing of physical properties of metals [C21D](#), [C22F](#); electroforming [C25D 1/00](#))

(NOTES omitted)

B21L MAKING METAL CHAINS (making chains or chain links by casting [B22D 25/02](#); chains in general [F16G](#))

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|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1/00 | Making chains or chain links by bending workpieces of rod, wire, or strip to form links of oval or other simple shape (B21L 3/00 , B21L 7/00 take precedence) | 11/02 | . each link being formed of a single member of which both ends are bent or shaped to engage the middle portions of the next link |
| 1/02 | . by bending the ends of the workpieces to abut | 11/04 | . . the ends being pierced or punched to form eyes |
| 1/04 | . by bending and interconnecting the ends of the workpieces with or without separate jointing members | 11/06 | . . . the workpiece being of thin strip metal |
| 3/00 | Making chains or chain links by bending the chain links or link parts and subsequently welding or soldering the abutting ends (B21L 7/00 takes precedence) | 11/08 | . the ends being interengaged with other parts of the same link |
| 3/02 | . Machines or devices for welding chain links | 11/10 | . the chain links having opposed correspondingly shaped cylindrical and hook-like parts of which one parts forms a hinge-like support for the adjacent link (B21L 11/02 takes precedence) |
| 3/04 | . . by making use of forge or pressure welding | 11/12 | . Forming bead chains |
| 5/00 | Making chains or chain links by working the starting material in such a way that integral, i.e. jointless, chains links are formed | 11/14 | . Making chain links with inserted or integrally-formed studs |
| 5/02 | . in such a way that interconnected links are formed | 13/00 | Making terminal or intermediate chain links of special shape; Making couplings for chains, e.g. swivels, shackles |
| 7/00 | Making chains or chain links by cutting single loops or loop-parts from coils, assembling the cut parts and subsequently subjecting same to twisting with or without welding | 15/00 | Finishing or dressing chains or chain links, e.g. removing burr material, calibrating (B21L 9/06 takes precedence) |
| 9/00 | Making chains or chain links, the links being composed of two or more different parts, e.g. drive chains (B21L 1/04 , B21L 7/00 , B21L 11/14 , B21L 13/00 take precedence) | 15/005 | . {Pre-stretching chains} |
| 9/02 | . of roller-chain or other plate-link type | 15/02 | . Twisting already closed links |
| 9/04 | . . Punching or bending the different parts of the chain links | 19/00 | Appurtenances for chain-making not restricted to any particular process |
| 9/06 | . . Sorting, feeding, assembling, riveting, or finishing parts of chains | 21/00 | Tools or implements for repairing chains using metal-working operations, e.g. for detaching deformed chain links |
| 9/065 | . . . {Assembling or disassembling} | 99/00 | Subject matter not provided for in other groups of this subclass |
| 9/08 | . . Combining the chain links with auxiliary parts, e.g. welding-on wear-resistant parts | | |
| 11/00 | Making chains or chain links of special shape | | |
| 11/005 | . {Making ornamental chains (B21L 11/02 - B21L 11/14 take precedence; ornamental chains A44C)} | | |